

### **In The Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A porous substrate, comprising:  
a substrate and;  
a plurality of porous layers ~~thereon~~ on the substrate,  
wherein ~~[[[the]]]~~ an average opening diameter of pores in a first porous layer of said plurality of porous layers positioned in an outermost surface is smaller than ~~[[the]]~~ an average diameter of pores in a second porous layer of said plurality of porous layers positioned on a substrate side relative to said first porous layer ~~positioned in said outermost surface~~.
2. (Currently Amended) A porous substrate, comprising:  
a substrate; and  
a plurality of porous layers ~~thereon~~ on the substrate,  
wherein ~~[[the]]~~ an average opening diameter of pores in a first porous layer of said plurality of porous layers positioned in an outermost surface is smaller than ~~[[the]]~~ an average diameter of pores in a second porous layer of said plurality of porous layers positioned on a substrate side relative to said first porous layer ~~positioned in said outermost surface~~; and ~~[[the]]~~ a volume porosity of said plurality of porous layers is 10%-90%.
3. (Currently Amended) A porous substrate, comprising:  
a substrate; and  
two porous layers ~~thereon~~ on the substrate,

wherein ~~[[the]]~~ an average opening diameter of pores in a first porous layer of said two porous layers positioned in an outermost surface is smaller than ~~[[the]]~~ an average diameter of pores in a second porous layer positioned on a substrate side relative to said first porous layer; and more than 50% of said pores in said first porous layer penetrate from ~~[[the]]~~ a surface of said first porous layer to ~~[[the]]~~ an interface between said first and second porous layer.

4. (Currently Amended) A porous substrate, comprising:

a substrate; and

two porous layers ~~thereon~~ on the substrate,

wherein ~~[[the]]~~ an average opening diameter of pores in a first porous layer of said two porous layers positioned in an outermost surface is smaller than ~~[[the]]~~ an average diameter of pores in a second porous layer positioned on a substrate side relative to said first porous layer; more than 50% of said pores in said first porous layer penetrate from ~~[[the]]~~ a surface of said first porous layer to ~~[[the]]~~ an interface between said first and second porous layer; and ~~[[the]]~~ a volume porosity of said first and second porous layer is 10%-90%.

5. (Original) The porous substrate according to claim 3, wherein said first porous layer comprises a metal material.
6. (Original) The porous substrate according to claim 3, wherein said first porous layer comprises a metal oxide, a metal nitride, or a metal carbide.
7. (Original) The porous substrate according to claim 3, wherein said second porous layer comprises a semiconductor material.

8. (Original) The porous substrate according to claim 3, wherein said second porous layer comprises a group III nitride series compound semiconductor material.
9. (Original) The porous substrate according to claim 3, wherein said first porous layer comprises TiN or Pt, and said second porous layer comprises GaN.
10. (Original) The porous substrate according to claim 3, wherein said average opening diameter of said porosity in said first porous layer is not more than 1  $\mu\text{m}$ .
11. (Original) The porous substrate according to claim 3, wherein the film thickness of said first porous layer is not more than 1  $\mu\text{m}$ .
12. (Withdrawn) A fabrication method for a porous substrate, comprising growing two or more different material layers on a substrate, heating said each layer, and thereby forming two or more porous layers with pores therein.
13. (Currently Amended) A GaN series semiconductor layered substrate, comprising a GaN series semiconductor layer grown on ~~[[a]]~~ the porous substrate defined in claim 1.
14. (Withdrawn) A fabrication method for a GaN series semiconductor layered substrate, comprising growing two or more different material layers on a substrate, heating said each layer, thereby forming a porous substrate with two or more porous layers having pores therein, and growing a GaN semiconductor layer on that porous substrate.
15. (Currently Amended) A GaN series semiconductor layered substrate, comprising a GaN series semiconductor layer grown on ~~[[a]]~~ the porous substrate defined in claim 2.
16. (Withdrawn-Currently Amended) A GaN series semiconductor layered substrate, comprising a GaN series semiconductor layer grown on ~~[[a]]~~ the porous substrate defined in claim 3.

17. (Currently Amended) A GaN series semiconductor layered substrate, comprising a GaN series semiconductor layer grown on [[a]] the porous substrate defined in claim 4.
18. (New) The porous substrate according to claim 1, wherein a material of said first porous layer is different from a material of said second porous layer.
19. (New) The porous substrate according to claim 18, wherein said first porous layer comprises a metal material, a metal oxide, a metal nitride, a metal carbide, or combinations thereof, and said second porous layer comprises a semiconductor material.